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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/926,078	08/27/2001	Schinsuke Uga		1992

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EXAMINER

CONTEE, JOY KIMBERLY

ART UNIT PAPER NUMBER

2686

DATE MAILED: 01/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/926,078	<b>Applicant(s)</b> UGA ET AL.	
	<b>Examiner</b> Joy K. Contee	<b>Art Unit</b> 2686	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 December 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-42 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-42 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>10/21/02</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground of rejection.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1,10,36,37,39-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen, in view of Kamalski, U.S. Patent No. 6,539,212.

Regarding claims 1, 10, 36 and 37, Cohen discloses a radio communication apparatus (and method) comprising:

a terminal interface unit for inputting data ( col. 3,lines 15-30 and col. 3,lines 3-15);

a radio communication control unit for inputting the data input by the terminal interface unit, for processing the data based on protocol, and outputting the data (col. 6,lines 35-57);

a confidentiality/integrity processing unit for inputting a control signal and data from the radio communication control unit, performing at least one of encryption of the data as confidentiality processing and generation of a message authentication code for detecting tampered data as integrity processing on the data input, and outputting the

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data processed to the radio communication control unit (col. 7, line 38 to col. 8, line 60);  
and

a radio communication unit for inputting, modulating and sending the data output from the radio communication control unit (col. 8, lines 27-34) .

Cohen fails to explicitly disclose processing the data based on protocol to judge a data kind.

In a similar field of endeavor, Kamalski discloses processing the data based on protocol to judge a data kind (col. 3, line 38 to col. 5, line 49).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Cohen to include protocol to judge a data kind before processing data for the purpose of allowing a data service to be incorporated in the information in the data signal such that data service will share the same infrastructure as the program signal (see Kamalski, col. 1, lines 52-57).

Regarding claims 2-9 and 11-14, Cohen and Kamalski further discloses the radio communication apparatus and method of claim 1 and 10, respectively, wherein the confidentiality/integrity processing unit inputs the control signal from the radio communication control unit and selectively inputs the data from the terminal interface unit based on the control signal input, and wherein the confidentiality/integrity processing unit performs confidentiality processing on the data input and outputs the data which has been performed confidentiality processing to the radio communication unit (see Cohen col. 7, line 38- col. 8, line 34). Cohen also discloses non-transparent (i.e., read on ESN data) and transparent (i.e., reads on speech) data wherein a

confidentiality/integrity process is performed on both forms of data (see Cohen col. 2, lines 50-61 and col. 11, lines 25-31). Also, confidentiality/integrity processing (i.e., reads on functional unit), micro-controller is connected with a parallel interface (see Cohen col. 5, lines 31-65) and connected to the terminal and radio communication interface with a serial interface (see Cohen Fig. 1, col. 5, line 30 to col. 6, line 10).

4. Claims 15-35 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cohen and Kamalski, in view of Raivisto, U.S. Patent No. 6,449, 473

Regarding claims 19 and 38, Cohen and Kamalski discloses a radio communication apparatus (and method) comprising:

- a terminal interface unit for inputting data ( see Cohen col. 3, lines 15-30 and col. 3, lines 3-15);

- a radio communication control unit for inputting the data input by the terminal interface unit, for processing the data based on protocol, and outputting the data (see Cohen col. 6, lines 35-57);

- a confidentiality/integrity processing unit for inputting a control signal and data from the radio communication control unit, performing at least one of encryption of the data as confidentiality processing and generation of a message authentication code for detecting tampered data as integrity processing on the data input, and outputting the data processed to the radio communication control unit (see Cohen col. 7, line 38 to col. 8, line 60); and

- a radio communication unit for inputting, modulating and sending the data output from the radio communication control unit (see Cohen col. 8, lines 27-34) .

Cohen fails to explicitly disclose processing the data based on protocol to judge a data kind.

In a similar field of endeavor, Kamalski discloses processing the data based on protocol to judge a data kind (col. 3, line 38 to col. 5, line 49).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Cohen to include protocol to judge a data kind before processing data for the purpose of allowing a data service to be incorporated in the information in the data signal such that data service will share the same infrastructure as the program signal (see Kamalski, col. 1, lines 52-57).

Further, Cohen and Kamalski do not explicitly disclose decrypting data that has been encrypted.

In a similar field of endeavor, Raivisto provides evidence of decrypting data and recalculating data (col. 4, lines 25-49).

At the time of the invention it would have been obvious to one of ordinary skill in the art to modify Cohen and Kamalski to include decryption such that data constantly changed and authenticated so that it can be detected.

Regarding claims 15-18, 20-35, Cohen and Kamalski as modified by Raivisto discloses the radio communication apparatus (and cellular phone and mobile station or base transceiver and radio network controller) of claim 19, wherein the confidentiality/integrity processing unit includes a confidentiality processing unit for processing unit for performing an integrity processing on the data input separately (and

using encryption algorithm) (see Cohen, col. 5, lines 31-65 and col. 7, line 36 to col. 8, lines 60).

### ***Conclusion***

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joy K Contee whose telephone number is 571.272.7906. The examiner can normally be reached on Monday through Friday, 5:30 a.m. to 2:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on 571.272.7905. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JC

  
JAY K. CONTEE  
PATENT EXAMINER